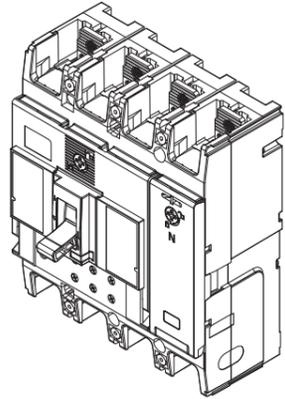




# INSTALLATION INSTRUCTIONS MOULDED CASE CIRCUIT BREAKERS TEMBREAK PRO P250 4P BASIC ELECTRONIC



NHP Electrical Engineering Products Pty Ltd  
A.B.N. 84 004 304 812  
AUS 1300 NHP NHP | nhp.com.au  
NZ 0800 NHP NHP | nhp-nz.com

**TOOLS REQUIRED (NOT included)**

- T1 Screwdriver Flathead (5mm)
- T2 Screwdriver Phillips (#2)
- T3 17mm Socket wrench
- T4 6mm Allen key Socket wrench
- T5 17mm Ring Spanner

**HARDWARE (included)**

- A M8x20 Socket screw (8 qty)
- B M8 spring washer (8 qty)
- C M8 flat washer (8 qty)
- D M4x55 mounting screws (2 qty)
- E Interpole Barriers (3 qty)
- Instruction Manual (This Document) (1 qty)

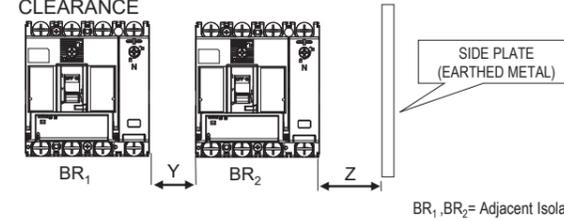
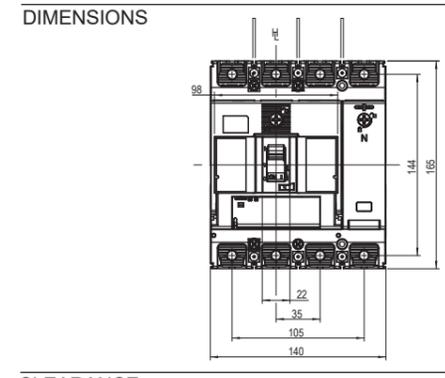
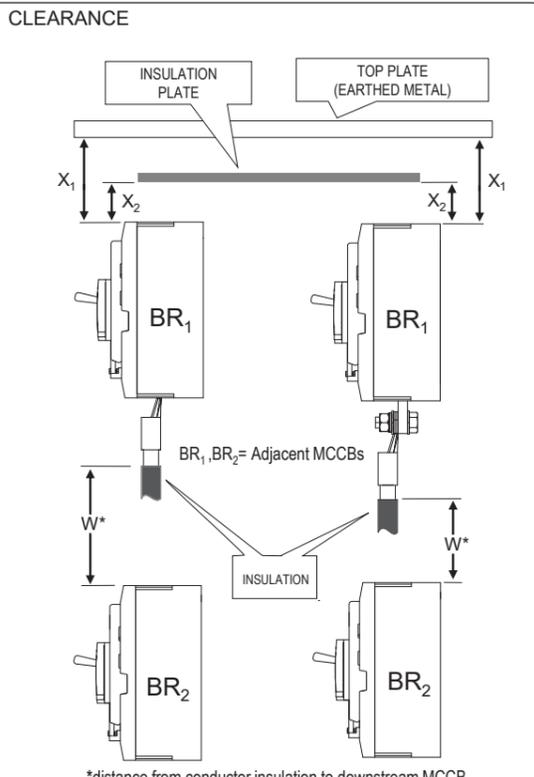
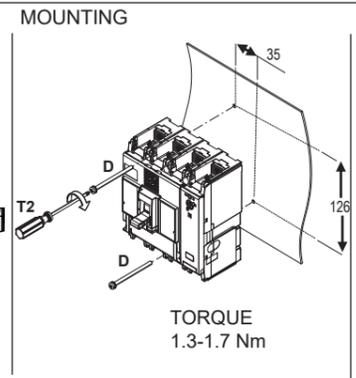
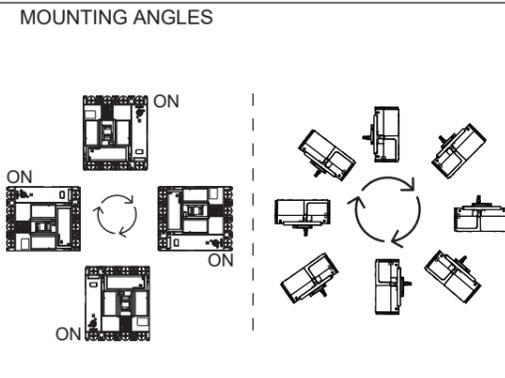
**HARDWARE (NOT included)**

- F Lugs or Copper Bars
- G \*M10x25 hex bolt (8 qty)
- H \*M10 flat washer (8 qty)
- I \*M10 Belleville washer (8 qty)
- J \*M10 nut (8 qty)

\*For extension bar connection only

**OPTIONAL (NOT included)**

- K Extension Bars
- L Terminal Covers
- M Terminal Cover Lock
- N Handle Lock
- Internal Accessories



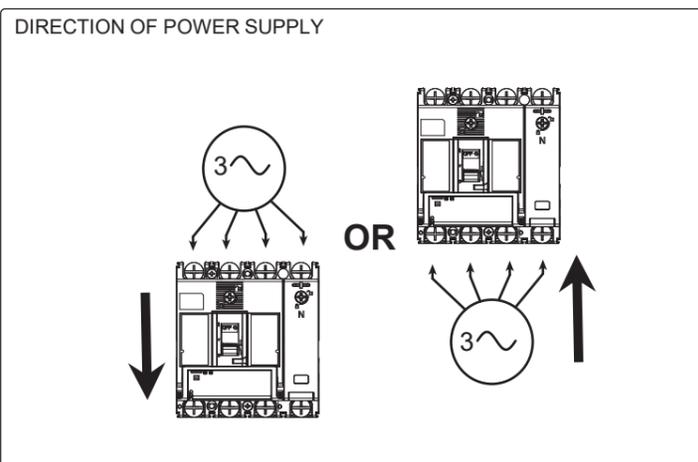
MCCB Cat No.	Y min (mm)	Z min (mm)
P250F	0	25
P250N	0	25
P250H	0	25

MCCB Cat No.	W* min (mm)	X <sub>1</sub> min (mm)	X <sub>2</sub> min (mm)
P250F	50	40	30
P250N	80	80	30
P250H	80	80	30

**OPERATING INSTRUCTIONS**

Operation Force (Nm)

OFF → ON	55
ON → OFF	40
TRIP → OFF	65



**INTERNAL ACCESSORIES ASSEMBLY PROCEDURE\***

**STEP 1 TRIP MCCB**

**STEP 2 OPEN COVER**

**STEP 3 IDENTIFY TRIP BAR & MECHANISM**

**STEP 4 UVT/SHUNT INSTALLATION**

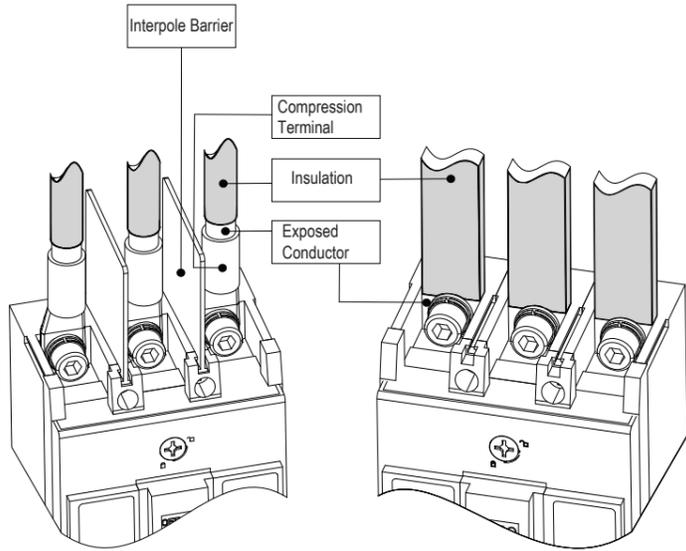
**4.1 UVT/SHUNT INSTALLATION**

**STEP 4.2 ALARM INSTALLATION**

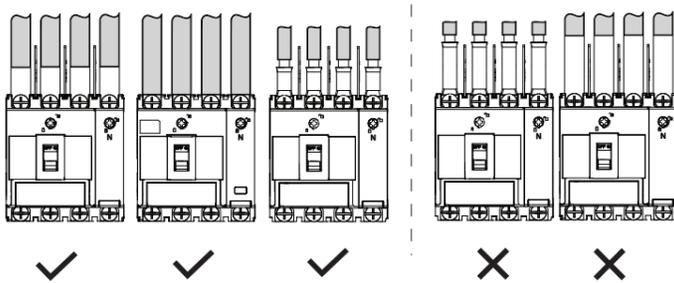
**STEP 5 CLOSE MCCB COVER**

\*For additional internal accessory installations, scan QR code and refer to user manual for more details

TOPSIDE INSULATION RECOMMENDATIONS – 415 / 440V AC

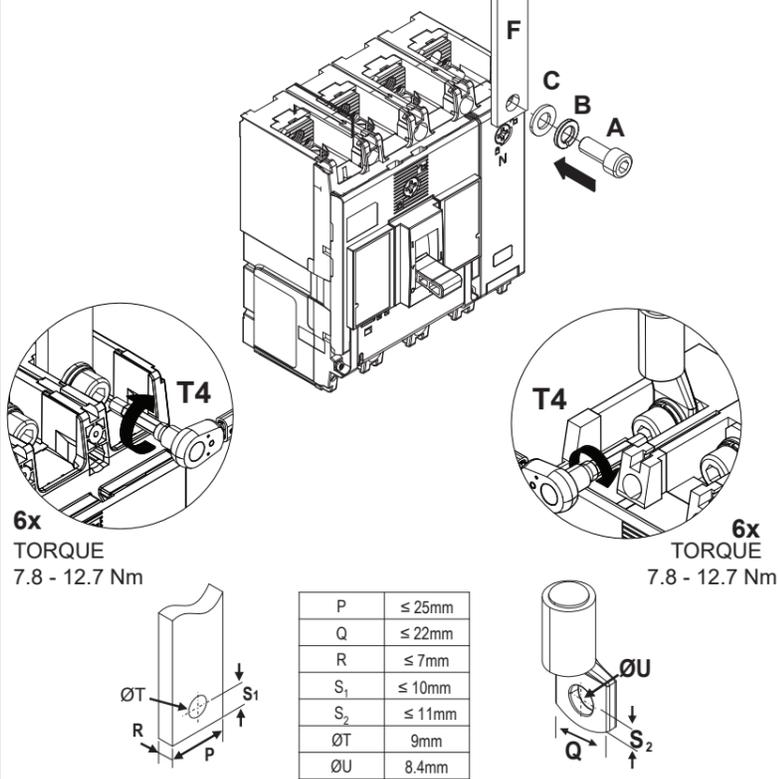


NOTE: Insulate the exposed conductor to achieve IP2X or protect from finger access.

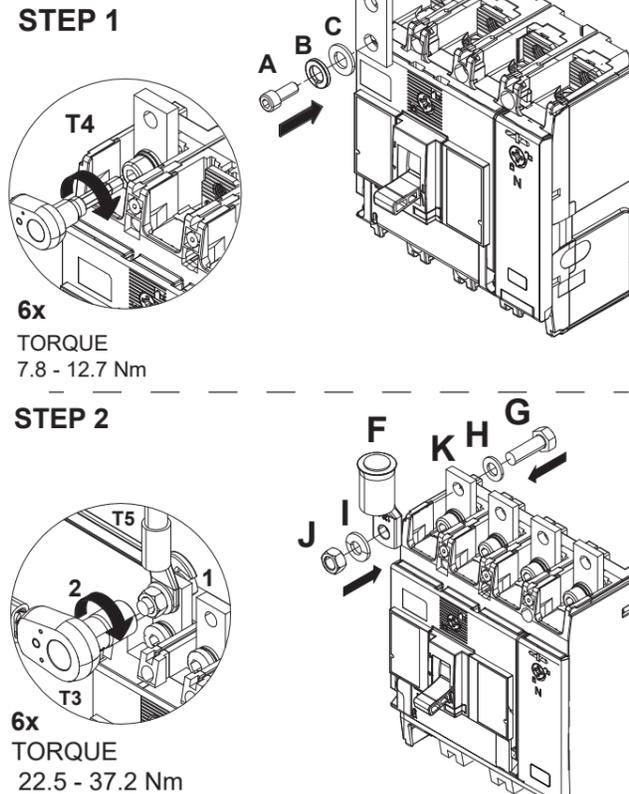


CONDUCTOR CONNECTION PROCEDURE -- FRONT CONNECTION

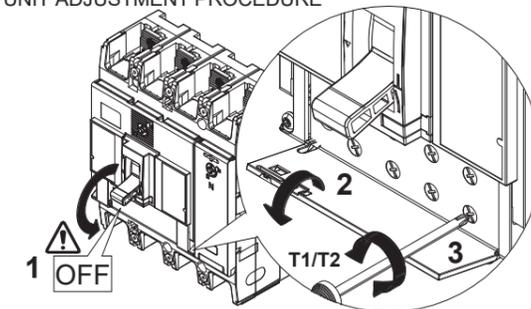
A	M8x20 Socket screw	F	Lug or copper bar	I	M10 Belleville washer
B	M8 Spring washer	G	M10x25 hex bolt	J	M10 Nut
C	M8 Flat washer	H	M10 Flat washer	K	Extension Bar



FRONT CONNECTION -- EXTENSION BAR CONNECTION PROCEDURE



TRIP UNIT ADJUSTMENT PROCEDURE



Protection Settings		
L	$I_{r1} I_{r2}$	Threshold Long Time Protection (Rated Current)
	$t_r$	Long Time Delay (Time Delay)
S	$I_{sd}$	Threshold Short Time Protection
	$t_{sd}$	Short Time Delay
	$I^2t$ ON / OFF	$I^2t$ curve on Short delay protection activated or not
I	$I_i$	Instantaneous Protection Threshold
GF	$I^2t$ ON/OFF	$I^2t$ curve on Earth Protection Activated (ON) or not activated. (OFF)

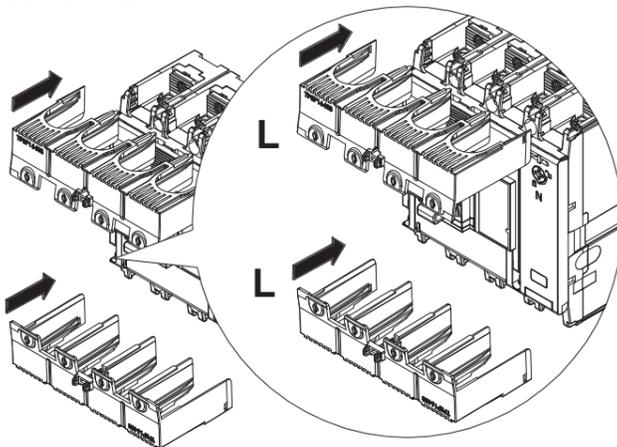
NOTE: The  $I_r$  ( Rated Current ) threshold is firstly set using the  $I_{r1}$  MAX adjustment dial. If necessary , fine adjustments of 1% increments of  $I_{r1}$  are possible using the  $I_{r2}$  dial from 0.92 to 1.

NOTE: The  $t_r$  time delay defines the trip time of the long-time delay protection for a current of  $6 \times I_r$

NOTE: The Ground Fault Protection can be turned ON and OFF using the GF dial for a current of  $0.4 \times I_n$ .

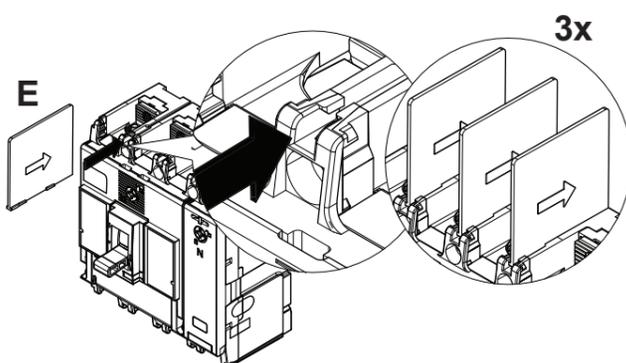
FOR MORE INFORMATION, PLEASE SCAN THE QR CODE

TERMINAL COVER

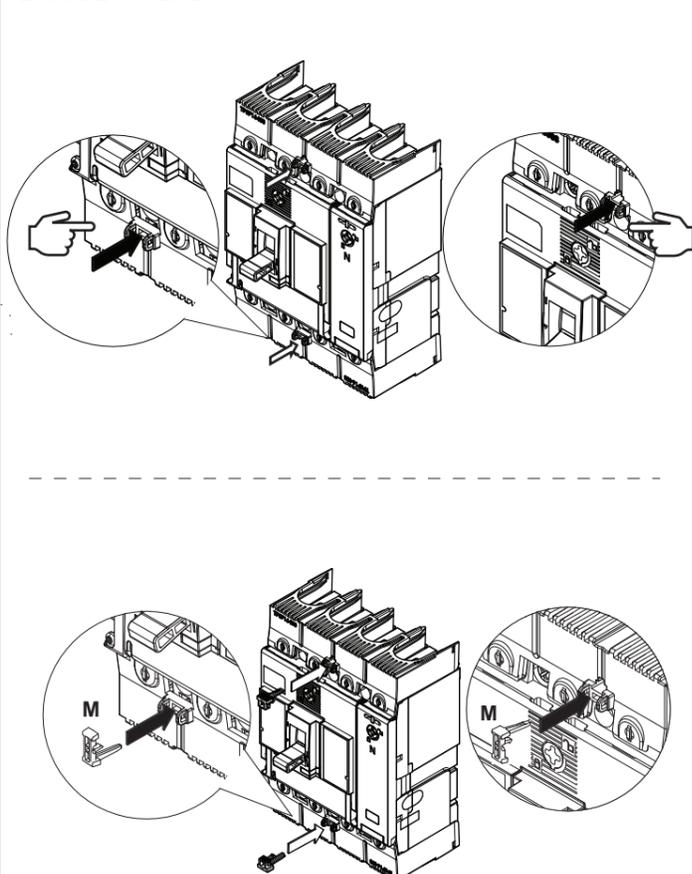


OR

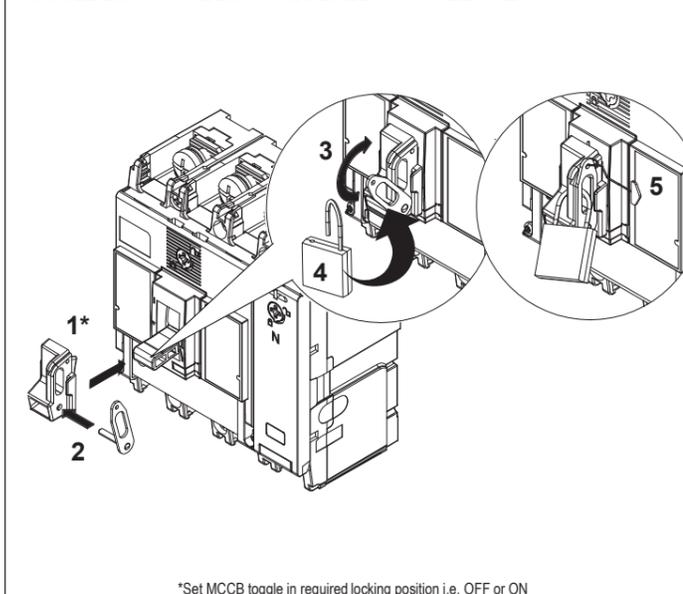
INTERPOLE BARRIER



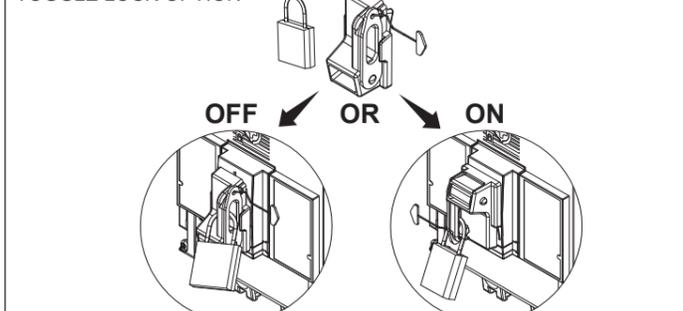
TERMINAL COVER LOCK



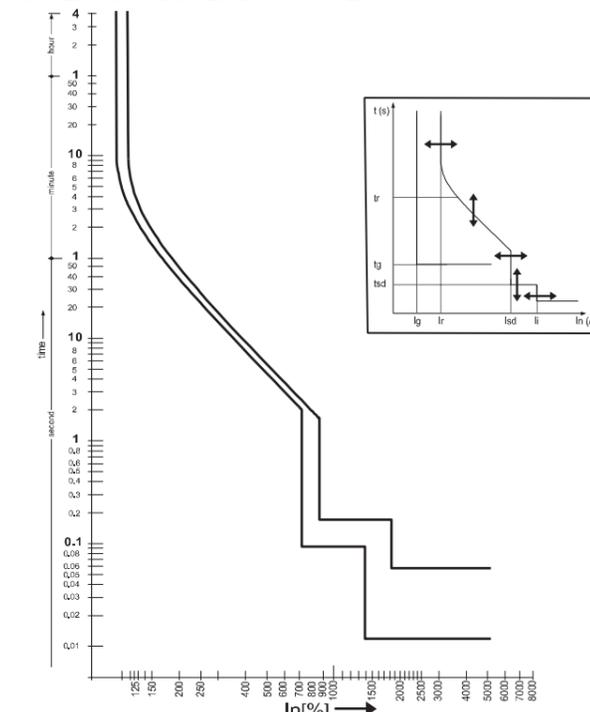
TOGGLE LOCK / PADLOCK ASSEMBLY PROCEDURE



TOGGLE LOCK OPTION



TIME CURRENT CHARACTERISTIC CURVE



$I_n$ (A)	$I_r$ (A)	$I_{sd}$ (A)	$t_r$ (s)	$t_{sd}$ (ms)	TEST IN
125	180	225	7.5	75	LSI
160	225	280	5	50	PICK UP
200	280	350	3	30	PTA
250	350	450	2	20	READY
320	450	550	1.5	15	OFF/ON
400	550	700	1	10	
500	700	850	0.75	7.5	
630	850	1050	0.5	5	
800	1050	1300	0.3	3	

NOTE: When  $I_r$  is OFF, the long time and short time protections are deactivated, and only instantaneous protection (ICB) is activated